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3 SEM TDC ZOOH (CBCS) C 7

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(Nov/Dec)

ZOOLOGY

(Core)

Paper : C-7

(Fundamentals of Biochemistry)

Full Marks : 53

Pass Marks : 21

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Fill in the blanks : 1×5=5

(a) Working combination of apoenzyme and co-enzyme is called _____.

(b) The chemical linkage between glycerol and fatty acid is called _____.

(c) The general formula of monosaccharide is _____.

(2)

- (d) The immunoglobulin which can cross placenta is ____.
- (e) Nucleic acids are polymers of ____.
2. Distinguish between (any two) : $4 \times 2 = 8$
- (a) Purines and Pyrimidines
- (b) Essential and Non-essential amino acids
- (c) Monosaccharides and Disaccharides
3. Write short notes on any two of the following : $4 \times 2 = 8$
- (a) Types of RNA
- (b) Glycoconjugates
- (c) Hyperchromaticity of DNA
4. Write an explanatory note on levels of organization in protein with suitable diagram. 10

Or

What is meant by denaturation of DNA?
Describe Watson and Crick model of DNA with suitable diagram. $2+8=10$

(3)

5. What are saturated and unsaturated fatty acids? Add a note on importance of phospholipids. $2\frac{1}{2}+2\frac{1}{2}+5=10$

Or

Define immunoglobulin. Describe the typical structure of immunoglobulin with diagram. $2+5+3=10$

6. What are cofactors? Write accounts on allosteric enzyme and isoenzymes. $2+5+5=12$

Or

What is Lineweaver-Burk plot? Discuss about the different methods of enzyme inhibition. $3+9=12$
